

- L 001 ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE HPS 345W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- H 001 *** 5-2 STEEL ***
- L 002 ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 345 AND PAINTED IN ACCORDANCE WITH SYSTEM 1 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- H 002 *** 5-2 STEEL ***
- L 003 ALL DIMENSIONS SHOWN ARE HORIZONTAL OR VERTICAL, UNLESS OTHERWISE NOTED.
- H 003 ** ***
- L 004 ALL FIELD CONNECTIONS TO BE 22.23mm DIA. HIGH STRENGTH BOLTS UNLESS OTHERWISE NOTED. FOR HIGH STRENGTH BOLTS, SEE SPECIAL PROVISIONS.
- H 004 *** PSP ***
- L 005 STIFFENERS ARE NOT REQUIRED ON THE OUTSIDE OF EXTERIOR BEAMS.
- H 005 *** 6.6.2.1 BEARING STIFFENERS & BEARING STIFFENERS USED AS CONNECTOR PLATES, ROLLED BEAMS ***
- L 006 BEARING STIFFENERS ARE TO BE PLACED NORMAL TO THE WEB OF THE GIRDER AND SHALL BE PLUMB.
- H 006 *** ***
- L 007 A CHARPY V-NOTCH TEST IS REQUIRED ON ALL BEAM SECTIONS, COVER PLATES AND SPLICE PLATES AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH ARTICLE 1072-9 OF THE STANDARD SPECIFICATIONS.
- H 007 *** 6.6.7 CHARPHY V-NOTCH ***
- L 008 A CHARPY V-NOTCH TEST IS REQUIRED FOR WEB PLATES, BOTTOM FLANGE PLATES, BOTTOM FLANGE SPLICE PLATES AND WEB SPLICE PLATES (IF USED) FOR ALL GIRDERS AND IN ACCORDANCE WITH ARTICLE 1072-9 OF THE STANDARD SPECIFICATIONS.
- H 008 *** POLICY MEMO 9-12-01***
- L 009 CHARPY V-NOTCH TESTS ARE REQUIRED FOR ALL TOP OR BOTTOM FLANGE PLATES WHICH FALL WITHIN THESE LIMITS, ALL WEB PLATES, AND ALL SPLICE PLATES. IF A PERMITTED SHOP FLANGE SPLICE IS NOT USED, CHARPY V-NOTCH TESTS WILL BE REQUIRED FOR THE ENTIRE FLANGE PLATE. FOR CHARPY V-NOTCH TESTS, SEE ARTICLE 1072-9 OF THE STANDARD SPECIFICATIONS.
- H 009 *** FIG 6-118 ***
- L 010 NO WELDING OF FORMS OR FALSEWORK TO THE TOP FLANGE WILL BE PERMITTED IN THIS REGIONAL.
- H 010 *** 6.6.6 FABRICATION AND CONSTRUCTION DETAILS ***
- L 011 CAMBERED GIRDER LENGTHS SHALL BE ADJUSTED AND BEARINGS ARE TO BE PLACED ON THE CAMBERED GIRDER SO AS TO BE ALIGNED WITH THE ANCHORS AFTER THE DEAD LOAD DEFLECTION HAS OCCURRED. SHOP DRAWINGS SHALL BE PREPARED ACCORDINGLY.
- H 011 *** 6.7.6 TFE BEARINGS ***
- L 012 AT FIXED POINTS OF SUPPORT, NUTS FOR ANCHOR BOLTS SHALL BE TIGHTENED FINGER TIGHT AND THEN BACKED OFF 1/2 TURN. THE THREAD OF THE NUT AND BOLT SHALL THEN BE BURRED WITH A SHARP POINTED TOOL.
- H 012 *** 6.7.6 TFE BEARINGS ***

L 013 AT ALL POINTS OF SUPPORT IN SPANS _____, NUTS FOR ANCHOR BOLTS SHALL BE
TIGHTENED FINGER TIGHT AND GIVEN AN ADDITIONAL 1/4 TURN. THE THREAD OF THE
NUT AND BOLT SHALL THEN BE BURRED WITH A SHARP POINTED TOOL.

H 013 *** 6.7.4 POT BEARINGS ***

L 014 WHERE DIAPHRAGMS ARE TO BE BOLTED TO EXISTING STEEL BEAMS, DO NOT REMOVE
PAINT FROM THE CONTACT SURFACE.

H 014 *** 8-2 ***

L 015 CONNECTION BOLTS ARE TO BE LOCATED AT THE BOTTOM OF THE CONNECTION SLOTS AND
TIGHTENED TO A SNUG FIT PRIOR TO FIELD WELDING OPPOSITE END OF DIAPHRAGM.
AFTER WELDING DIAPHRAGM TO CONNECTION ANGLE AND PRIOR TO THE POURING OF THE
SLAB, BACK OFF BOLTS 1/2 TURN TO ALLOW FOR VERTICAL DEFLECTION OF NEW BEAM.
AFTER DEFLECTIONS HAVE OCCURRED, TIGHTEN BOLTS AS REQUIRED BY THE STANDARD
SPECIFICATIONS.

H 015 *** 8-2 (REHAIBLITATION PROJECTS) ***

L 016 NUTS ON BOLTS FOR CONNECTING DIAPHRAGM TO CONNECTOR PLATE SHALL BE LEFT LOOSE
FOR PURPOSE OF ADJUSTMENT UNTIL BOTH SIDES OF SLAB HAVE BEEN POURED.

H 016 *** 6.6.3.2 INTERMEDIATE DIAPHRAGMS, STAGED CONSTRUCTION ***

L 017 THE 38.10mm DIA. PIPE SLEEVE SHALL BE CUT FROM SCHEDULE 40 PVC PLASTIC PIPE.
THE PVC PIPE SHALL MEET THE REQUIREMENTS OF ASTM D1785.

H 017 *** 6.7.6 TFE BEARINGS ***

L 018 NO SEPARATE PAYMENT WILL BE MADE FOR THE PIPE SLEEVES. PAYMENT SHALL BE
INCLUDED IN THE LUMP SUM CONTRACT PRICE BID FOR "TFE EXPANSION BEARING
ASSEMBLIES".

H 018 *** 6.7.6 TFE BEARINGS ***

L 019 AT THE CONTRACTOR'S OPTION, FILL PLATES (WHERE USED) MAY BE COMBINED WITH
MASONRY PLATES.

H 019 *** 6.7.6 TFE BEARINGS ***

L 020 FOR TFE EXPANSION BEARING ASSEMBLIES, SEE SPECIAL PROVISIONS.

H 020 *** 6.7.6 TFE BEARINGS ***

L 021 ALL BEARING PLATES SHALL BE AASTHO M270 GRADE _____.

H 021 *** 6.7.7 SOLE PLATE DETAILS ***

L 022 FOR POT BEARINGS, SEE SPECIAL PROVISIONS.

H 022 *** FIG 6-128 ***

L 023 ANCHOR BOLTS SHOULD BE GROUTED BEFORE FALSEWORK IS PLACED.

H 023 *** 6.7.6 TFE BEARINGS ***

L 024 PERMITTED FLANGE AND WEB SHOP SPLICES SHALL NOT BE LOCATED WITHIN 4.5 METERS
OF MAXIMUM DEAD LOAD DEFLECTION (NOR WITHIN 4.5 METERS OF INTERMEDIATE
BEARINGS OF CONTINUOUS UNITS). KEEP 600mm MINIMUM BETWEEN WEB AND FLANGE
SHOP SPLICES. KEEP 150mm MINIMUM BETWEEN CONNECTOR PLATE OR TRANSVERSE
STIFFENER WELDS AND WEB OR FLANGE SHOP SPLICES.

H 024 *** 6.6.6 FABRICATION AND CONSTRUCTION DETAILS ***

L 025 A BOLTED FIELD SPLICE WILL BE PERMITTED IN THE GIRDERS IN SPAN _____. IF A FIELD
SPLICE IS USED, IT SHALL BE MADE ENTIRELY AT THE CONTRACTOR'S EXPENSE AND NO
ADDITIONAL MEASUREMENT OR PAYMENT WILL BE MADE FOR THE ADDITIONAL MATERIALS
REQUIRED. THE LOCATION, DETAILS, AND SPLICE MATERIAL WILL BE SUBJECT TO THE
APPROVAL OF THE ENGINEER.

H 025 *** ***

L 026 STUDS ON GIRDERS MAY BE SHIFTED UP TO 25mm IF NECESSARY TO CLEAR FLANGE
SPLICE WELD.
H 026 *** ***

L 027 WHEN WELDING THE SOLE PLATE TO THE GIRDER, USE TEMPERATURE INDICATING WAX
PENS, OR OTHER SUITABLE MEANS, TO ENSURE THAT THE TEMPERATURE OF THE BEARING
DOES NOT EXCEED 121°C. TEMPERATURES ABOVE THIS MAY DAMAGE THE TFE OR
ELASTOMER.
H 027 *** 6.7.4 POT BEARINGS ***

L 028 SOLE PLATES SHOULD BE WELDED TO BEAM FLANGES AND ANCHOR BOLTS SHOULD BE
GROUTED BEFORE FALSEWORK IS PLACED.
H 028 *** 6.7.4 POT BEARINGS ***

L 029 WHEN FIELD WELDING THE SOLE PLATE TO THE GIRDER FLANGE, USE TEMPERATURE
INDICATING WAX PENS, OR OTHER SUITABLE MEANS, TO ENSURE THAT THE TEMPERATURE
OF THE SOLE PLATE DOES NOT EXCEED 149°C. TEMPERATURES ABOVE THIS MAY DAMAGE
THE ELASTOMER.
H 029 *** 6.7.7 SOLE PLATE DETAILS ***

L 030 SLOPE FOR THE ZERO CAMBER BASE LINE VARIES.
H 030 *** 6.6.8.2 CAMBER OF CONTINUOUS SPANS ***

L 031 NO SHOP CAMBER REQUIRED, TURN NATURAL MILL CAMBER UP.
H 031 *** 6.6.8.3 CAMBERS FOR ROLLED BEAMS ***

L 032 ALL SURFACES OF BEARING PLATES SHALL BE SMOOTH AND STRAIGHT.
H 032 *** FIG. 6-128 & 6-131 ***

L 033 TENSION ON THE AASHTO M164 BOLTS SHALL BE CALIBRATED USING DIRECT TENSION
INDICATOR WASHERS. FOR DIRECT TENSION INDICATORS, SEE SPECIAL PROVISIONS.
H 033 *** 6.6.5 BOLTED CONNECTIONS ***

L 034 END OF BEAMS AND GIRDERS SHALL BE PLUMB.
H 034 *** 6.6.6 FABRICATION AND CONSTRUCTION DETAILS ***

L 035 FOR CHARPY V-NOTCH TEST, SEE SPECIAL PROVISIONS.
H 035 *** 6.7.5 DISC BEARINGS ***

L 036 BEARING STIFFENER MAY REQUIRE COPING IF WIDER THAN BOTTOM FLANGE TO AVOID
INTERFERENCE WITH THE ANCHOR BOLT.
H 036 *** 6.6.2.1 BEARING STIFFENERS & BEARING STIFFENERS USED AS CONNECTOR PLATES,
PLATE GIRDERS ***

L 037 APPLY AN 8 MIL THICK 99.99 PERCENT ZINC (W-ZN-1) THERMAL SPRAYED COATING WITH
A 0.5 MIL THICK SEAL COAT TO ALL GIRDER SURFACES IN ACCORDANCE WITH THE
THERMAL SPRAYED COATING SPECIAL PROVISION AND SECTION 442 OF THE STANDARD
SPECIFICATIONS. PRIOR TO APPLICATION, CREATE A COMPANION COUPON FOR APPROVAL
BY THE ENGINEER. FOR THERMAL SPRAYED COATING, SEE SPECIAL PROVISIONS.
H 037 *** 12-13 WEATHERING STEEL AND STEEL COATINGS ***

L 038 PRIOR TO BEGINNING METALLIZATION, THE CONTRACTOR WILL PROVIDE METALLIZED
SAMPLES TO THE ENGINEER FOR APPROVAL.
H 038 *** 12-13 WEATHERING STEEL AND STEEL COATINGS ***

L 039 AT THE CONTRACTOR'S OPTION, THE OPTIONAL BOLTED FIELD SPLICE MAY BE OMITTED,
PROVIDED THE CONTRACTOR OBTAINS ALL PERMITS REQUIRED FOR TRANSPORTING THE
LONGER PIECE LENGTHS.
H 039 *** 6.6.4 BOLTED FIELD SPLICES ***

L 040 NEEDLE BEAM TYPE SUPPORTS ARE REQUIRED FOR THE OVERHANG FALSEWORK IN THE
SPANS WITH 27" BEAMS.
H 040 *** 6.6.2 DESIGN ***

L 041 AT THE CONTRACTOR'S OPTION, THE DIAPHRAGM WITH THE WELDED GUSSET PLATES MAY
BE USED IN LIEU OF THE DIAPHRAGM WITH BOLTED ANGLES AT NO ADDITIONAL COST TO
THE DEPARTMENT.
H 041 *** 6.6.3.2 INTERMEDIATE DIAPHRAGMS ***

L 042 FABRICATORS SHALL DETAIL DIAPHRAGM MEMBERS AND CONNECTIONS FOR FULL DEAD LOAD
FIT UP. GIRDERS SHALL BE PLUMB AFTER THE FULL AMOUNT OF DEAD LOAD IS
APPLIED.
H 042 *** 6.6.6 FABRICATION AND CONSTRUCTION DETAILS ***

L 043 STRUCTURAL STEEL ERECTION IN A CONTINUOUS UNIT SHALL BE COMPLETE BEFORE
FALSEWORK OR FORMS ARE PLACED ON THE UNIT.
H 043 *** 6.6.9 CONSTRUCTION NOTES ***

L 044 THE CONTRACTOR MAY SUBSTITUTE DISC BEARINGS FOR THE POT BEARINGS SHOWN. FOR
OPTIONAL DISC BEARINGS, SEE SPECIAL PROVISIONS.
H 044 *** PSP ***